

AMENDMENTS TO THE CLAIMS

The listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims

1-9. (Cancelled)

10. (New) A communication network node, said node comprising:
one or more time-slot buses operative to transfer frames from a plurality of serial input lines located on a receiving side of the node to a plurality of serial output lines located on the transmitting side of the node;
one or more data buffers at the receiving side of each time-slot bus, operative to buffer the frames from the input lines before transmission;
a connection table for each time-slot bus, wherein each entry in the connection table contains at least a data address pointing to a byte in the associated data buffer, and wherein the entries are arranged in the same order as their corresponding bytes are to be transferred on a data bus; and
a counter, synchronized to a clock used by the time-slot bus for transmission of time slots, said counter operative to indicate which byte in the associated data buffer that presently is to be read out from the data-bus buffer into a time slot in the associated data bus by indexing the entries of the connection table.

11. (New) The communications network node recited in claim 10, wherein the data buffers are shared between all the input lines by means of respective pointers allocating one memory area in the data buffer for each of the input lines.

12. (New) The communications network node recited in claim 10, wherein each entry in the connection table contains, in addition to the data address, a control field.

13. (New) The communications network node recited in claim 10, wherein there is only one data buffer for each time slot bus and, within the same frame, a data location in the buffer is not read before write-in.

14. (New) A communication network node, said node comprising:
one or more time slot buses operative to transfer frames from a plurality of serial input lines located on a receiving side of the node to a plurality of serial output lines located on the transmitting side of the node;

one or more data buffers for each time-slot bus at the transmitting side operative to buffer the frames from time-slot buses before forwarding to an output line; and,

a connection table, wherein each entry in the connection table contains at least a data address pointing to a byte in one of the data buffers, and wherein the entries are arranged in the same order as their corresponding bytes are to be transferred to an output line.

15. (New) The communications network node recited in claim 14, wherein:

one starting pointer per output line is allocated to one memory area in the connection table for each of the output lines and points to the first entry in each memory area; and,

one indexing pointer per output line points at the entry in the connection table holding the address to the byte currently being fetched from one of the buffers to the associated output line.

16. (New) The communications network node recited in claim 14, wherein each entry in the connection table contains, in addition to the data address, a control field.

17. (New) The communications network node recited in claim 14, wherein there is only one data buffer for each time-slot bus and, within the same frame, a data location in the buffer is not read before write-in.

18. (New) The communications network node recited in claim 14, wherein there is only one data buffer for each time-slot bus and, within the same frame, a data location in the buffer is not read before write-in.

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